

A NEW SPECIES OF THE GENUS *ATRICHOPOGON* KIEFFER
(DIPTERA: CERATOPOGONIDAE) FROM MEXICO

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Abstract.—A new species, *Atrichopogon mexicanus*, is described from Chiapas, Mexico. This species is included in the subgenus *Atrichopogon*.

Key Words: Diptera, Ceratopogonidae, *Atrichopogon*, Mexico, new species

The 75 Neotropical species of *Atrichopogon* are poorly understood, with no modern keys and with many species undescribed in the genus. Six named species are currently recognized from Mexico (Borkent and Spinelli 2000), and Huerta (1996) described an additional five, but unnamed species from the state of Chiapas. One of these is described and named in this paper.

The specimens were slide mounted using the technique of Wirth and Marston (1968) but were stained with pink lignin to enhance observation of some features. Terms for taxonomic characters follow those by Downes and Wirth (1981), Wirth (1994), and Szadziewski et al. (1996). All type material, is deposited in the Collection of Arthropods with Medical Importance of the Institute of the Diagnostic y Epidemiology Referencia (InDRE).

Atrichopogon (Atrichopogon) mexicanus
Huerta, new species
(Figs. 1–9)

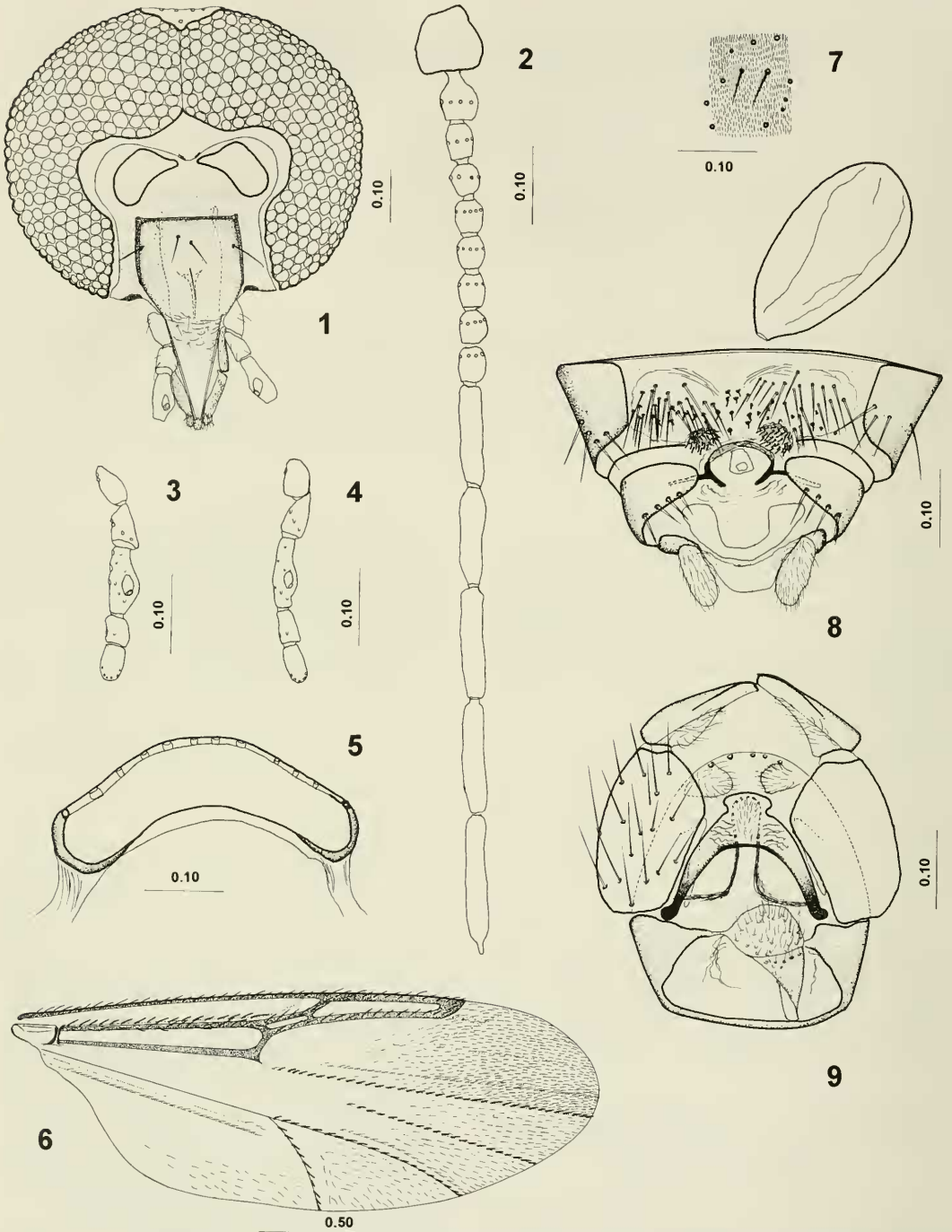
Diagnosis.—A large brown species; female with one long spermatheca; male genitalia with pilose lobule on sternite IX.

Description.—Female: *Head* (Fig. 1): Brown. Eyes bare. Antenna (Fig. 2) with lengths of flagellar segments in the dimensions (μm): 71.7-41-41-41-41-41-43-43-

133.3-128.2-143.5-143.5-174.3; antennal ratio (AR): 1.99; distal flagellomeres brown; proximal pale. Length of flagellum about 1.08 mm. Palpus (Fig. 3) brown, with segment lengths (μm): 51.2-51.2-92.3-41-51.2; third segment with deep sensory pit opening located on distal half. Palpal ratio (PR): 2.1. Length of last two segments of palpus equal to length of third segment. Palpus length: 0.28 mm. Mouth parts simple, without teeth.

Thorax: Brown, scutellum pale brown with 12 bristles (Fig. 5), postscutellum brown. Paratergite with 1 seta. Wing length 1.76 mm (1.74-1.79; $n = 2$); width 0.72 mm ($n = 2$) (Fig. 6), with radial veins pale brown, membrane with dense microtrichia. Macrotrichia present on all veins, cells, more dense on distal half. Cells r_1 , r_2 well-developed. Second radial cell about 3 times longer than first. Costal ratio (CR): 0.75. Halter pale. Legs pale yellowish, with basal and subapical pale band of all femora; basal and distal third pale band of all tibiae. Tarsomeres pale. Tibial comb with 10 spines. TR(I) 2.4, TR(II) 2.8, TR(III) 2.5. Scutum with dense vestiture of setae (Fig. 7), stripes not visible.

Abdomen: Pale with moderately dense vestiture of brownish setae. Genital sclerotization as in Fig. 8, with sternite VIII well



Figs. 1-9. *Atrichopogon mexicanus*. 1-3, 5-8, Female. 4, 9, Male. 1, Head. 2, Antennal segments. 3, Palpus. 4, Palpus. 5, Scutellum. 6, Wing. 7, Scutal vestiture. 8, Genitalia segments and spermatheca. 9, Ventral aspect of genitalia. Scales in millimeters.

sclerotized with dense hairs. Spermatheca (Fig. 8), 0.28 mm by 0.14 mm, without neck.

Male: Similar to female with usual sexual differences. Palpus (Fig. 4) brown, with segment lengths (μm): 41-51.2-92.3-46.1-61.5; third segment with sensory pit located on distal half. Palpal ratio (PR): 2.9; palpus length: 0.29 mm.

Thorax: Scutellum with 12 bristles, short setae. Tibial comb with nine spines, and long spur. TR(II) 2.5, TR(III) 2.1. Wing length 1.79 mm, width 0.56 mm. Second radial cell 3.4 times longer than first.

Abdomen: Genitalia (Fig. 9) yellow brown. Sternite IX short with prominent pilose lobule on posterior margin; tergite IX round, caudomedian process bearing setae; gonocoxite wide, pilose; gonostylus short, wide basally, with apical extreme round, bearing 1 apical tooth. Aedeagus membranous medially, short and broad, with basal arch high 0.6 of total length; basal arms markedly sclerotized; caudosubmedian projections enlarged at apex, without lateral teeth.

Etymology.—The specific epithet “*mexicanus*” refers to the country of origin.

Distribution.—Mexico (Chiapas).

Types.—Holotype: ♂, Mexico, Chiapas, El Vergel, 5 June 1935, light trap, Col. Dampf (MF 4268). Paratypes: 2 ♀, same date as for holotype. Deposited in the Collection of Arthropods with Medical Importance of the InDRE.

Discussion.—This species is included in the subgenus *Atrichopon* by the presence of a single spermatheca, female sternite 8 lacking bifurcating projection, more or less uniformly colored, gonostylus with single apex, sensory pit not at apex of segment three of maxillary palpus, fifth palpal segment rounded apically, and second radial

cell much longer than first. The male of this species can be associated with the female by the body coloration and legs, vestiture of the abdomen and scutum, and the form of the palpus and clypeus.

Atrichopogon mexicanus differs from all other Neotropical members of the genus by having a male genitalia with a distinctive setose lobe on the posterior margin of sternite 9. The female is similar to those of a number of other species of *Atrichopogon*, but the length of the spermatheca is unusual.

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